

TEXAS DEPARTMENT OF INSURANCE

Engineering Services / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104
Phone No. (512) 322-2212 Fax No. (512) 463-6693

PRODUCT EVALUATION

Effective August 1, 2011

WIN-694

*The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation **July 2013**.*

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

ProLine Series® Clad Wood Double Hung Windows, Non-impact Resistant, manufactured by

Pella Corporation
102 Main Street
Pella, Iowa 50219
Telephone: (641) 621-1000

will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

The ProLine Series® aluminum clad wood double hung windows evaluated in this report are individual, non-impact resistant windows. This product evaluation report is for aluminum clad wood double hung windows based on the following tested constructions:

General Description:

System	Description	Label Rating
1	ProLine Series Clad Wood Double Hung Window; (X/X)	H-LC30 45 x 77
2	ProLine Series LX Clad Wood Double Hung Window; (X/X)	H-LC35 37 x 65
3	ProLine Series LX Clad Wood Double Hung Window; (X/X)	H-LC40 33 x 59
4	ProLine Series LX Clad Wood Double Hung Window; (X/X)	H-LC50 33 x 47
5	ProLine Series LX Clad Wood Double Hung Window; (X/X)	H-LC50 29 x 53
6	ProLine Series LX Clad Wood Double Hung Window; (X/X)	H-LC35 33 x 65
7	ProLine Series LX Clad Wood Double Hung Window; (X/X)	H-LC40 29 x 65

General Description (continued):

System	Description	Label Rating
8	ProLine Series LX Clad Wood Double Hung Window; (X/X)	H-LC30 33 x 77
9	ProLine Series LX Clad Wood Double Hung Window; (X/X)	H-LC45 42 x 72
10	ProLine Series LX Clad Wood Double Hung Window; (X/X)	H-LC30 42 x 72

Product Dimensions:

System	Overall Size	Top Sash Size	Bottom Sash Size
1	45" x 77"	42.25" x 38"	42.25" x 38"
2	37" x 65"	34.43" x 31.98"	34.43" x 31.98"
3	33" x 59"	30.43" x 29"	30.43" x 29"
4	33" x 47"	30.43" x 23"	30.43" x 23"
5	29" x 53"	26.43" x 26"	26.43" x 26"
6	33" x 65"	30.43" x 31.98"	30.43" x 31.98"
7	29" x 65"	26.4" x 32"	26.4" x 32"
8	33" x 77"	30.43" x 38"	30.43" x 38"
9	42" x 72"	39.8" x 35.2"	39.8" x 35.2"
10	42" x 72"	39.8" x 35.2"	39.8" x 35.2"

Glazing Description:

System	Glass Construction ¹	Glazing Method ²
1-10	IG-1	GM-1

Note: ¹ See the "Glass Construction Key" for the glazing construction.

² See the "Glazing Method Key" for the glazing method description.

Glass Construction Key:

IG-1: Sealed insulating glass units. The insulating glass unit is comprised of two single strength ($\frac{3}{32}$ ") annealed glass lites separated by a desiccant-filled spacer system. The glass thickness, type, and construction used in the tested assembly and in smaller assemblies shall conform to ASTM E 1304.

Glazing Method Key:

GM-1: The insulating glass units are groove-glazed with butyl tape and silicone sealant.

Frame Construction: The frame head, sill, and jamb consist of wood members. The frame corners are fastened with two (2) screws per corner. **Aluminum Cladding:** The wood frame members are clad on the exterior with extruded aluminum cladding. The aluminum cladding is screwed to plastic corner keys.

Sash Construction: The sash members consist of wood members. The sash corners are mortise and tenon construction. Each corner is secured with nails and is glued.

Hardware:

- Four (4) helical tensile spring and pulley balance assemblies. Two assemblies located inside each jamb.
- Two (2) spring loaded metal cam locks with detent and strikes. Located on the bottom sash.

Product Identification: A certification program label (WDMA Hallmark Certified) will be affixed to the window. The certification program label includes the manufacturer's name; Product Description: **Double Hung One Wide**; performance characteristics; the approved inspection agency (AAMA); and the following applicable standards: ANSI/AAMA/NWDA 101/I.S.2-97 and AAMA/WDMA/CSA 101/I.S.2/A440-05.

LIMITATIONS

Design pressures (DP):

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressure (psf)
1	45	77	± 30
2	37	65	± 35
3	33	59	± 40
4	33	47	± 50
5	29	53	± 50
6	33	65	± 35
7	29	65	± 40
8	33	77	± 30
9	42	72	± 45
10	42	72	± 30

Impact Resistance: These window assemblies do not satisfy the Texas Department of Insurance's criteria for protection from windborne debris. These window assemblies will need to be protected with an impact protective system when installed in areas where windborne debris protection is required.

Acceptance of Smaller Assemblies: Windows assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

INSTALLATION INSTRUCTIONS

General: The window assembly shall be prepared and installed in accordance with the manufacturers recommended installation instructions. Detailed drawings and installation instructions are available from the manufacturer.

Installation:

Systems 1 thru 8: The wall framing shall be minimum Spruce-Pine-Fir dimension lumber. The windows shall be secured to the wall framing using the roll-formed aluminum installation fin. The installation fin is snap-fit into a kerf on the frame cladding and sill. The installation fin is secured to the wall framing with minimum 2 inch long 11 gauge smooth shank roofing nails. The fasteners are installed through the pre-punched holes located 5 inches to 7 inches on center. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing members.

System 9: The wall framing shall be minimum Spruce-Pine-Fir dimension lumber. The windows shall be secured to the wall framing using installation clips (1 ⅞" x 6 ⅛" x 0.0516"). The installation clips are located approximately 6 inches from each corner and one at each checkrail. The installation clips are secured to the window frame with one (1) No. 6 x 1 ¼" screw. The installation clips are secured to the wall framing with one (1) No. 8 screw. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing members.

System 10: The wall framing shall be minimum Spruce-Pine-Fir dimension lumber. The windows shall be secured to the wall framing using the frame of the window with minimum No. 8 x 3" screws. The fasteners are located approximately 6 inches from each corner and one at each checkrail. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing members.

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.